

Serial No. 09/989,462

Docket No. K-0348

Amendment dated April 25, 2006

Reply to Office Action of December 28, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A device for processing a PIP (picture in picture) in a TV comprising:
 - a first video processing part for receiving, and processing a main picture video signal into a signal displayable on a screen;
 - a second video processing part for receiving, and processing a sub picture video signal into a signal displayable on a region of the screen;
 - a control part for providing a control signal according to a user's command;
 - an adjusting part for adjusting a presenting ratio of a video signal from the second video processing part, wherein a given number of bits of the video signal from the second video processing part are selected and presented in order of significance level thereof; and
 - a switching part for superimposing the video signal from the first video processing part and the video signal from the adjusting part according to the control signal from the control part, by ~~replacing~~ adding bits of the video signal from the first video processing part in reverse order of significance level thereof with the video signal bits presented from the adjusting part.

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2. (Previously presented) A device as claimed in claim 1, wherein the first video processing part includes:

an analog/digital converter for receiving, and converting analog R, G, B video signals into digital R, G, B video signals, and

a format converter for maintaining outputs of the digital R, G, B video signals converted at the analog/digital converter constant.

3. (Previously presented) A device as claimed in claim 1, wherein the second video processing part includes:

a video decoder for receiving a video signal, and decoding the sub picture video signal from the video signal, and

a second format converter for converting an output of the video signal decoded at the video decoder constant.

4. (Original) A device as claimed in claim 1, wherein the adjusting part is a bit shifter.

5-6. (Canceled)

7. (Currently amended) A method for processing a PIP (picture in picture) in a TV, comprising:

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displaying the PIP when a user selects a PIP function;

displaying a mix ratio of the displayed PIP and main picture;

adjusting the mix ratio the user desires with reference to the displayed mix ratio;

and

~~replacing adding bits of~~ a video signal of the main picture in reverse order of significance level thereof with bits of a video signal of the PIP selected and presented in order of significance level thereof according to the adjusted mix ratio.

8. (Previously Presented) A method as claimed in claim 7, wherein displaying the mix ratio includes displaying the mix ratio in a form of an OSD (On Screen Display).

9. (Previously Presented) A method as claimed in claim 7, wherein adjusting the mix ratio includes adjusting a luminance of a PIP according to a user's requirement with reference to the mix ratio displayed in an OSD (On Screen Display) form, for adjusting the mix ratio of a picture in a region the main picture and the sub picture are superimposed.

10. (Previously presented) A method as claimed in claim 7, wherein adjusting the mix ratio includes fixing the mix ratio depending on connections between a video signal data from a

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first video processing part and a video signal from a second video processing part according to a user's requirement.

11. (Currently amended) A method for processing a PIP (picture in picture) in a digital television receiver, the method comprising:

processing a first video signal representative of a main picture into main picture data displayable on a display screen;

processing a second video signal representative of a sub picture into sub picture data displayable on a portion of the display screen;

outputting a given number of data bits among the sub picture data according to a user command in order of significance level thereof; and

superimposing the outputted sub picture data bits on the main picture data,
wherein the outputted sub picture data bits ~~replaces~~are added to bits of the main picture data in reverse order of significance of the main picture data bits ~~during the superimposing~~.

12. (Currently amended) The method of claim 11, further comprising displaying the ~~replaced~~added main picture data on the display screen, wherein both of the main and sub pictures are viewable in the portion of the display screen.

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13. (Previously Presented) The method of claim 11, wherein processing the first video signal representative of a main picture includes:

receiving analog R, G, and B video signals representative of the main picture and converting the analog R, G, and B video signals into digital R, G, and B video signals; and

converting a format of the converted digital R, G, and B video signals into a required format.

14. (Previously Presented) The method of claim 11, wherein processing the second video signal representative of a sub picture includes:

receiving a composite video signal and extracting a video signal representative of the sub picture from the composite signal; and

converting a format of the extracted video signal into a required format.

15-16. (Canceled)

17. (Currently amended) A digital television system comprising:

a first video processing unit processing a first video signal representative of a main picture into displayable main picture data;

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a second video processing unit processing a second video signal representative of a sub picture into displayable sub picture data;

a controller generating a control signal according to a user command;

an output unit coupled to the controller for outputting a given number of data bits among the sub picture data in order of significance level thereof in response to the control signal; and

a switching unit coupled to the output unit for superimposing the outputted sub picture data bits on the main picture data,

wherein the switching unit superimposes the outputted sub picture data bits on the main picture data by ~~substituting adding~~ the outputted sub picture data bits ~~for~~with bits of the main picture data in reverse order of significance of the main picture data bits.

18. (Previously Presented) The digital television system of claim 17, further comprising a display screen coupled to the switching unit for displaying the superimposed picture data, wherein both of the main and sub pictures are viewable in a portion of the display screen.

19. (Previously Presented) The digital television system of claim 17, wherein the first video processing unit comprises:

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an analog to digital (AD) converter converting analog R, G, and B video signals representative of the main picture into digital R, G, and B video signals; and
a format converter coupled to the AD converter for converting a format of the digital R, G, and B video signals into a required format.

20. (Previously Presented) The digital television system of claim 17, wherein the second video processing unit comprises:

a video decoder receiving a composite video signal and extracting the second video signal from the composite video signal; and
a format converter converting a format of the extracted video signal into a required format.

21-22. (Canceled)